GOVERNMENT OF INDIA
RAILWAYS
LOK SABHA

UNSTARRED QUESTION NO:1134
ANSWERED ON:02.03.2016
Train Collision Avoidance System
Chaudhary Shri P.P.;Gandhi Shri Dilip Kumar Mansukhlal;Joshi Shri Chandra Prakash;Joshi Shri Pralhad Venkatesh;Kachhadia Shri Naranbhai;Kaushik Shri Ramesh Chander

Will the Minister of RAILWAYS be pleased to state:

(a) whether the railways is implementing Train Collision Avoidance Systems and GPS monitoring systems across the rail network and if not, the reasons therefor;

(b) the details of trains where such systems have been implemented, zone-wise over the past five years and current year;

(c) whether such systems are being implemented on both passenger and goods trains and if so, the details thereof;

(d) the date by which such systems will be implemented on each train that runs on the rail network; and

(e) the details of train accidents and casualties over the last five years and current year that could have been avoided had such systems been in place?

Answer

MINISTER OF STATE IN THE MINISTRY OF RAILWAYS

(SHRI MANOJ SINHA)

(a) to (e) A Statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF UNSTARRED QUESTION NO. 1134 BY SHRI RAMESH CHANDER KAUSHIK, SHRI DILIPKUMAR MANSUKHLAL GANDHI, SHRI PRALHAD JOSHI, SHRI CHANDRA PRAKASH JOSHI, SHRI P. P. CHAUDHARY AND SHRI NARANBHAI KACHHADIYA TO BE ANSWERED IN LOK SABHA ON 02.03.2016 REGARDING TRAIN COLLISION AVOIDANCE SYSTEM

(a) Yes, Madam.
(b) (i) Train Collision Avoidance System (TCAS): TCAS has been indigenously developed by Research Designs and Standards Organisation (RDSO) in association with Indian Vendors. This system is aimed at providing capability to prevent train accidents caused due to driver's error of Signal Passing at Danger (SPAD) or over-speeding.
After successful initial Proof of Concept trials, limited field trials with multi-vendor equipment interoperability have been successfully conducted. Further, extended field trials of TCAS in pilot section Lingamapalli-Vikarabad-Wadi-Bidar (250 RKms) of Secunderabad Division of South Central Railway are in progress. Presently one pair of passenger train no. 57547/57548 has also been equipped for the trials in the pilot section.
(ii) Global Positioning System (GPS): GPS based "FOG PASS" device which displays the name and distance of approaching signals and other critical land marks in advance during poor visibility condition has been developed and is on trial. It is a portable equipment and issued to loco pilots for working trains during fog season.
Total 1381 nos. of Fog Pass device has been implemented on Indian Railways out of which 1017 are on Northern, 240 are on North Eastern and 124 are on North Western Railway on trial basis. â€¦2/-
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(c) Yes, Madam. TCAS and Fog Pass device have been designed to work on goods and passenger trains.
(d) Train Collision Avoidance System: Since the system is under trial at this stage, decision regarding its implementation on rail network shall be taken after successful conclusion of the trials
GPS based 'FOG PASS': Further provision of 5000 Fog Pass Device is proposed in Railway Budget 2016-17 for fog affected region of Northern and North Eastern area.
(e) Year-wise number of collisions (Consequential Train Accidents) and casualties during the 5 years and current year (up to January, 2016) are given as under:-

Year	No of collisions	Casualties	Injured
2010-11	5	240	296
2011-12	9	22	191
2012-13	6	27	76
2013-14	4	01	07
2014-15	5	15	58
2015-16 (Upto January 2016)	2	01	08

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